

PHYTOLITHUS FILICIS.



In Natura investiganda vix aliud jucundius quam vegetabilium et animalium certissimas reliquias per totum fere orbem sparsas, interdum etiam ipsis animalibus plantisque quæ in iisdem regionibus nunc dierum inveniuntur prorsus dissimiles attentius considerare. In re difficillima etiamnum satis obscura diu inter philosophos pugnatum est variis et sibi invicem contrariis argumentis. At manca fortasse vel adhuc est telluris cognitio, et concedendum certe est hanc nostram a primæva terra longe esse diversam, quam magna sæpe vi convulsam fuisse satis constat et igni aquaque vastatam; adeo ut hodie super rudera quasi et ruinas ambuletur.

Hujusmodi permutationum quamvis causa lateat, vis est notissima. In summis montibus a mari longe remotis, in ipsis etiam Andibus Peruvianis reperiuntur plurima substantiarum marinarum tum animalium tum vegetabilium vestigia, quarum multas cum recentes nunquam viderimus, vel species deperditas putemus necesse est, vel in altissimo oceani profundo latere, unde forsitan nec insana tempestatum vi attolluntur.

In intimis etiam carbonis et schisti stratis manifesta insunt indicia piscium, crustatorum, plantarum, &c; sæpissime autem filicum variarum, quarum aliæ ad species genuinas facile reduci possunt, aliæ vero ad illas referendæ sunt quæ aut diu perierunt, aut adhuc ignorantur. Harum quæ in
Museo

Museo Leveriano spectantur perfectior nulla est quam quæ in tabula cernitur, filix scilicet mas vulgaris seu *Polypodium filix mas Linnæi*, quo specimine vix bellius et integrius vel in ipso *horto sicco* videris, ipsæ enim in foliis fructificationes clare inspicere possunt.

De planta vulgatissima speciatim tractare supervacuum foret; per totam fere Angliam in locis incultis et juxta sepes generatur.

Repertum est hoc specimen in fragmento lapidis schistosi immersum.



FERN PHYTOLITHUS.



The indisputable remains of animal and vegetable bodies, so plentifully dispersed throughout almost all parts of the globe, and of which a great many are of a widely different appearance from the present natives of the regions in which they are found, form one of the most interesting points of speculation in the history of nature.

Various and even contradictory hypotheses have occasionally been proposed as elucidations of this subject, which yet remains in a considerable degree of obscurity; the true theory of the earth being perhaps still but very imperfectly understood. It must be allowed, however, that vast and violent changes have been wrought in the body of the primeval earth; that we walk as it were on the ruins of the original structure; and that both fire and water have united their forces to derange the first formation.

Of these great convulsions of nature, though the causes yet remain unexplored by all the endeavours of improved philosophy, yet the effects are every where visible.

On the tops of mountains, remotely distant from the sea, even on those of the Andes in Peru, are found the remains of innumerable marine productions, both animal and vegetable; many of which are still unknown in their recent state, and are therefore

fore either lost species, or else such as inhabit the deepest recesses of the ocean, from whence they are scarce ever raised by the utmost violence of storms and tempests.

In deep-laid strata of coal, slate, &c. are found plentiful specimens of fish, crustacea, plants, &c. The most frequent, however, seem to be those of Ferns, of which a great many different kinds are observed ; some easily reducible to their archetypes or proper species, while others appear to belong to species either lost or still unknown.

Among the most complete and curious specimens in the Leverian Museum, is that figured on the annexed plate, which represents in the most perfect manner the well-known European plant called the common male fern, (*Polypodium filix mas.* Lin.) So extremely perfect is this fossil vegetable, that the fructifications are distinctly seen on the leaves nearly in the same state as in a dried specimen.

To particularize the history of so well known a vegetable would be entirely unnecessary : it is sufficient to say that it is principally found in waste places, and by hedge sides, and is produced in most parts of this kingdom. The specimen is imbedded in a fragment of slaty stone.